AUTHOR INDEX

Adam, J. D., Magnetostatic wave devices for microwave signal processing, 96
Amir, H., Processing of infrared images by multiple microcomputer systems, 267
Athale, R. A., Digital optical processing, 149
Baller, H. H., On-board satellite signal processing and simulation, 189
Barr, H. S., Digital optical processing, 149
Barr, Paul C., Ada as a signal-processing language?, 205
Bartholomew, B. J., Digital optical processing, 149
Bond, J. Walter, Survey of concurrent-processors for signal processing applications, 174
Bonneau, R. J., Distributed fault-tolerant signal processor (FTSP) a, 198
Brentrup, Robert J., Ada as a signal-processing language?, 205
Bryson, William, Signal processing aspects of the S-1 multiprocessor project, 224
Caimi, Frank, Digital correlation by optical convolution/correlation, 155
Carlotto, Mark, Digital correlation by optical convolution/correlation, 155
Casasent, David, Digital correlation by optical convolution/correlation, 155
Chang, I. C., Characteristics of acousto-optic devices for signal processors, 129
Collins, S. A., Jr., Sequential logic element arrays for use in optical digital processors: applications and limitations, 139
Daehlin, O. Theodore, Real time optical computation of the ambiguity function, 104
Daniel, Michael R., Magnetostatic wave devices for microwave signal processing, 96
Eppler, Walter G., Track assembly and background suppression using an array processor and neighborhood coding, 258
Evett, R. C., Distributed fault-tolerant signal processor (FTSP), a, 198
Farmwald, P. Michael, Signal processing aspects of the S-1 multiprocessor project, 224
Fatehi, M. T., Sequential logic element arrays for use in optical digital processors: applications and limitations, 139
Firschein, Oscar, Track assembly and background suppression using an array processor and neighborhood coding, 258
Flanagan, Kevin L., Role of simulation in top down distributed signal processor design, the, 182
Gagliardi, R. M., Optical communications for deep space missions, 29
Gerhart, Grant R., Direct electronic Fourier transform (DEFT) spectra for surveillance and countersurveillance, 113
Golosman, B. Solomon, Space surveillance signal processor (S^3P) for background suppression and target detection with a staring mosaic sensor, 20
Grove, R. Curt, Real-time image processing system for automated inspection of drilled holes, 85
Hannigan, Joseph F., Direct electronic Fourier transform (DEFT) spectra for surveillance and countersurveillance, 113
——, Direct electronic Fourier transform (DEFT) spectra for terrain feature classification, 122
Hardaker, Philip R., Airborne video image enhancement, 47
Hecht, D. L., Characteristics of acousto-optic devices for signal processors, 129
Hilsenrath, Manfred, Space surveillance signal processor (S^3P) for background suppression and target detection with a staring mosaic sensor, 20
Hines, John, SPRINT—a high speed interactive array processing system, 249
Huang, Chao H., High-speed, two-dimensional filtering using residue arithmetic, 213
Kemp, David D., Space surveillance signal processor (S^3P) for background suppression and target detection with a staring mosaic sensor, 20
Kodres, U. R., Processing of infrared images by multiple microcomputer system, 267
Kung, H. T., Special-purpose devices for signal and image processing: an opportunity in very large scale integration (VLSI), 76
Lee, Margaret L., Airborne video image enhancement, 47
Lee, S. H., Digital optical processing, 149
Lee, Tzuo-Chang, Real time optical computation of the ambiguity function, 104
Manferdelli, John L., Signal processing aspects of the S-1 multiprocessor project, 224
McDonald, W. C., Evaluation of multi-microprocessor interconnection networks for a class of sensor data processing problems, 238
McKay, Joe M., Digital beam forming processor, 232
Murray, G. Graham, Motion-adaptive TV data compression, 51
Neft, Deborah, Digital correlation by optical convolution/correlation, 155
Nichols, Roy J., Optical sensor signal processing requirements for ballistic missile defense, 2
O'Keeffe, T. W., Magnetostatic wave devices for microwave signal processing, 96
Otto, Robert G., Space surveillance signal processor (S^3P) for background suppression and target detection with a staring mosaic sensor, 20
Psaltis, Demetri, Digital correlation by optical convolution/correlation, 155
Rainbolt, Stephen M., SPRINT—a high speed interactive array processing system, 249
Rapp, Bruce E., Real-time image processing system for automated inspection of drilled holes, 85
Rauch, Herbert E., Adaptive background suppression for real-time signal processing, 37
——, Track assembly and background suppression using an array processor and neighborhood coding, 258
Rebholz, Joseph J., Real time optical computation of the ambiguity function, 104
Rotz, Fred B., Compact, time-integrating optical correlator with variable time scaling, 161
Sarkady, Antal A., Interactive and recursive signal processor for 16-bit microcomputers, an, 279
Schell, R. R., Processing of infrared images by multiple microcomputer system, 267
Setty, K. S. L., Ultimate resolution criterion for out-of-the-cockpit visual scene generation in real time, the, 61
Souder, C. W., Real-time image processing system for automated inspection of drilled holes, 85
Staley, Patrick A., Motion-adaptive TV data compression, 51
Swartzlander, Earl E., Jr., Digital beam forming processor, 232
Tamura, Poohsan N., Real time optical computation of the ambiguity function, 104
Tao, T. F., Processing of infrared images by multiple microcomputer system, 267
Thoma, George R., Motion-adaptive TV data compression, 51
Ting, Chen-Hanson, Processing of real-time radiographic images, 70
——, Fourier transform faster than fast Fourier transform (FFT), 167
Trimble, Joel, Digital correlation by optical convolution/correlation, 155
Wallingford, Errol E., Interactive and recursive signal processor for 16-bit microcomputers, an, 279
Wasmundt, K. C., Sequential logic element arrays for use in optical digital processors: applications and limitations, 139
Wasson, J., Processing of infrared images by multiple microcomputer system, 267
Wilcox, David M., Optical sensor signal processing requirements for ballistic missile defense, 2
——, Super resolution algorithms in distributed real-time signal processing systems, 220
Williams, T. G., Evaluation of multi-microprocessor interconnection networks for a class of sensor data processing problems, 238
Wong, Robert Y., Airborne video image enhancement, 47
Woo, Leon K., Role of simulation in top down distributed signal processor design, the, 182

AUTHOR INDEX

Adam, J. D., Magnetostatic wave devices for microwave signal processing, 96
Amir, H., Processing of infrared images by multiple microcomputer systems, 267
Athale, R. A., Digital optical processing, 149
Baller, H. H., On-board satellite signal processing and simulation, 189
Barr, H. S., Digital optical processing, 149
Barr, Paul C., Ada as a signal-processing language?, 205
Bartholomew, B. J., Digital optical processing, 149
Bond, J. Walter, Survey of concurrent-processors for signal processing applications, 174
Bonneau, R. J., Distributed fault-tolerant signal processor (FTSP) a, 198
Brentrup, Robert J., Ada as a signal-processing language?, 205
Bryson, William, Signal processing aspects of the S-1 multiprocessor project, 224
Caimi, Frank, Digital correlation by optical convolution/correlation, 155
Carlotto, Mark, Digital correlation by optical convolution/correlation, 155
Casasent, David, Digital correlation by optical convolution/correlation, 155
Chang, I. C., Characteristics of acousto-optic devices for signal processors, 129
Collins, S. A., Jr., Sequential logic element arrays for use in optical digital processors: applications and limitations, 139
Daehlin, O. Theodore, Real time optical computation of the ambiguity function, 104
Daniel, Michael R., Magnetostatic wave devices for microwave signal processing, 96
Eppler, Walter G., Track assembly and background suppression using an array processor and neighborhood coding, 258
Evett, R. C., Distributed fault-tolerant signal processor (FTSP), a, 198
Farmwald, P. Michael, Signal processing aspects of the S-1 multiprocessor project, 224
Fatehi, M. T., Sequential logic element arrays for use in optical digital processors: applications and limitations, 139
Firschein, Oscar, Track assembly and background suppression using an array processor and neighborhood coding, 258
Flanagan, Kevin L., Role of simulation in top down distributed signal processor design, the, 182
Gagliardi, R. M., Optical communications for deep space missions, 29
Gerhart, Grant R., Direct electronic Fourier transform (DEFT) spectra for surveillance and countersurveillance, 113
Golosman, B. Solomon, Space surveillance signal processor (S^3P) for background suppression and target detection with a staring mosaic sensor, 20
Grove, R. Curt, Real-time image processing system for automated inspection of drilled holes, 85
Hannigan, Joseph F., Direct electronic Fourier transform (DEFT) spectra for surveillance and countersurveillance, 113
——, Direct electronic Fourier transform (DEFT) spectra for terrain feature classification, 122
Hardaker, Philip R., Airborne video image enhancement, 47
Hecht, D. L., Characteristics of acousto-optic devices for signal processors, 129
Hilsenrath, Manfred, Space surveillance signal processor (S^3P) for background suppression and target detection with a staring mosaic sensor, 20
Hines, John, SPRINT—a high speed interactive array processing system, 249
Huang, Chao H., High-speed, two-dimensional filtering using residue arithmetic, 213
Kemp, David D., Space surveillance signal processor (S^3P) for background suppression and target detection with a staring mosaic sensor, 20
Kodres, U. R., Processing of infrared images by multiple microcomputer system, 267
Kung, H. T., Special-purpose devices for signal and image processing: an opportunity in very large scale integration (VLSI), 76
Lee, Margaret L., Airborne video image enhancement, 47
Lee, S. H., Digital optical processing, 149
Lee, Tzuo-Chang, Real time optical computation of the ambiguity function, 104
Manferdelli, John L., Signal processing aspects of the S-1 multiprocessor project, 224
McDonald, W. C., Evaluation of multi-microprocessor interconnection networks for a class of sensor data processing problems, 238
McKay, Joe M., Digital beam forming processor, 232
Murray, G. Graham, Motion-adaptive TV data compression, 51
Neft, Deborah, Digital correlation by optical convolution/correlation, 155
Nichols, Roy J., Optical sensor signal processing requirements for ballistic missile defense, 2
O'Keeffe, T. W., Magnetostatic wave devices for microwave signal processing, 96
Otto, Robert G., Space surveillance signal processor (S^3P) for background suppression and target detection with a staring mosaic sensor, 20
Psaltis, Demetri, Digital correlation by optical convolution/correlation, 155
Rainbolt, Stephen M., SPRINT—a high speed interactive array processing system, 249
Rapp, Bruce E., Real-time image processing system for automated inspection of drilled holes, 85
Rauch, Herbert E., Adaptive background suppression for real-time signal processing, 37
——, Track assembly and background suppression using an array processor and neighborhood coding, 258
Rebholz, Joseph J., Real time optical computation of the ambiguity function, 104
Rotz, Fred B., Compact, time-integrating optical correlator with variable time scaling, 161
Sarkady, Antal A., Interactive and recursive signal processor for 16-bit microcomputers, an, 279
Schell, R. R., Processing of infrared images by multiple microcomputer system, 267
Setty, K. S. L., Ultimate resolution criterion for out-of-the-cockpit visual scene generation in real time, the, 61
Souder, C. W., Real-time image processing system for automated inspection of drilled holes, 85
Staley, Patrick A., Motion-adaptive TV data compression, 51
Swartzlander, Earl E., Jr., Digital beam forming processor, 232
Tamura, Poohsan N., Real time optical computation of the ambiguity function, 104
Tao, T. F., Processing of infrared images by multiple microcomputer system, 267
Thoma, George R., Motion-adaptive TV data compression, 51
Ting, Chen-Hanson, Processing of real-time radiographic images, 70
——, Fourier transform faster than fast Fourier transform (FFT), 167
Trimble, Joel, Digital correlation by optical convolution/correlation, 155
Wallingford, Errol E., Interactive and recursive signal processor for 16-bit microcomputers, an, 279
Wasmundt, K. C., Sequential logic element arrays for use in optical digital processors: applications and limitations, 139
Wasson, J., Processing of infrared images by multiple microcomputer system, 267
Wilcox, David M., Optical sensor signal processing requirements for ballistic missile defense, 2
——, Super resolution algorithms in distributed real-time signal processing systems, 220
Williams, T. G., Evaluation of multi-microprocessor interconnection networks for a class of sensor data processing problems, 238
Wong, Robert Y., Airborne video image enhancement, 47
Woo, Leon K., Role of simulation in top down distributed signal processor design, the, 182

Wu, Chialin, Considerations on real-time processing of spaceborne synthetic aperture radar data, 11
Yen, C. Y., Sequential logic element arrays for use in optical digital processors: applications and limitations, 139
Young, M. J., Distributed fault-tolerant signal processor (FTSP), a, 198

SUBJECT INDEX

Acousto-optic devices for signal processors, characteristics of, 129
Ada as a signal-processing language?, 205
Adaptive background suppression for real-time signal processing, 37
Adaptive TV data compression, motion-, 51
Airborne video image enhancement, 47
Algorithms in distributed real-time signal processing systems, super resolution, 220
Ambiguity function, real time optical computation of the, 104
Aperture radar data, considerations on real-time processing of spaceborne synthetic, 11
Arithmetic, high-speed, two-dimensional filtering using residue, 213
Array processing system, SPRINT—a high speed interactive, 249
Array processor and neighborhood coding, track assembly and background suppression using an, 258
Arrays for use in optical digital processors: applications and limitations, sequential logic element, 139
Assembly and background suppression using an array processor and neighborhood coding, track, 258
Automated inspection of drilled holes, real-time image processing system for, 85

Background suppression for real-time signal processing, adaptive, 37
Background suppression and target detection with a staring mosaic sensor, space surveillance signal processor (S^3P) for, 20
Background suppression using an array processor and neighborhood coding, track assembly and, 258
Ballistic missile defense, optical sensor signal processing requirements for, 2
Beam forming processor, digital, 232
Bit microcomputers, an interactive and recursive signal processor for 16-, 279

Characteristics of acousto-optic devices for signal processors, 129
Class of sensor data processing problems, evaluation of multimicroprocessor interconnection networks for a, 238
Classification, direct electronic Fourier transform (DEFT) spectra for terrain feature, 122
Coding, track assembly and background suppression using an array processor and neighborhood, 258
Communications for deep space missions, optical, 29
Compact, time-integrating optical correlator with variable time scaling, 161
Compression, motion-adaptive TV data, 51
Computation of the ambiguity function, real time optical, 104
Concurrent-processors for signal processing applications, survey of, 174
Considerations on real-time processing of spaceborne synthetic aperture radar data, 11
Convolution/correlation, digital correlation by optical, 155
Correlation by optical convolution/correlation, digital, 155
Correlator with variable time scaling, compact, time-integrating optical, 161
Countersurveillance, direct electronic Fourier transform (DEFT) spectra for surveillance and, 113
Criterion for out-of-the-cockpit visual scene generation in real time, the ultimate resolution, 61

(DEFT) spectra for surveillance and countersurveillance, direct electronic Fourier transform, 113
(DEFT) spectra for terrain feature classification, direct electronic Fourier transform, 122

Data compression, motion-adaptive TV, 51
Data, considerations on real-time processing of spaceborne synthetic aperture radar, 11
Data processing problems, evaluation of multimicroprocessor interconnection networks for a class of sensor, 238
Deep space missions, optical communications for, 29
Defense, optical sensor signal processing requirements for ballistic missile, 2
Design, the role of simulation in top down distributed signal processor, 182
Detection with a staring mosaic sensor, space surveillance signal processor (S^3P) for background suppression and target, 20
Digital beam forming processor, 232
Digital correlation by optical convolution/correlation, 155
Digital optical processing, 149
Digital processors: applications and limitations, sequential logic element arrays for use in optical, 139
Dimensional filtering using residue arithmetic, high-speed, two-, 213
Direct electronic Fourier transform (DEFT) spectra for surveillance and countersurveillance, 113
Direct electronic Fourier transfrom (DEFT) spectra for terrain feature classification, 122
Distributed fault-tolerant signal processor (FTSP), a, 198
Distributed real-time signal processing systems, super resolution algorithms in, 220
Distributed signal processor design, the role of simulation in top down, 182
Drilled holes, real-time image processing system for automated inspection of, 85

Electronic Fourier transfrom (DEFT) spectra for surveillance and countersurveillance, direct, 113
Electronic Fourier transform (DEFT) spectra for terrain feature classification, direct, 122
Element arrays for use in optical digital processors: applications and limitations, sequential logic, 139
Enhancement, airborne video image, 47
Evaluation of multi-microprocessor interconnection networks for a class of sensor data processing problems, 238

(FFT), Fourier transform faster than fast Fourier transform, 167
(FTSP), distributed fault-tolerant signal proccessor, 198
Fast Fourier transform (FFT), Fourier transform faster than, 167
Faster than fast Fourier transform (FFT), Fourier transform, 167
Fault-tolerant signal processor (FTSP), a distributed, 198
Feature classification, direct electronic Fourier transform (DEFT) spectra for terrain, 122
Filtering using residue arithmetic, high-speed, two-dimensional, 213
Forming processor, digital beam, 232
Fourier transform (DEFT) spectra for surveillance and countersurveillance, direct electronic, 113
Fourier transform (DEFT) spectra for terrain feature classification, direct electronic, 122
Fourier transform faster than fast Fourier transform (FFT), 167
Fourier transform (FFT), Fourier transform faster than fast, 167
Function, real time optical computation of the ambiguity, 104

Generation in real time, the ultimate resolution criterion for out-of-the-cockpit visual scene, 61

High speed interactive array processing system, SPRINT—a, 249
High-speed, two-dimensional filtering using residue arithmetic, 213

Image enhancement, airborne video, 47
Image processing: an opportunity in very large scale integration (VLSI), special-purpose devices for signal and, 76
Image processing system for automated inspection of drilled holes, real-time, 85
Images by multiple microcomputer system, processing of infrared, 267
Images, processing of real-time radiographic, 70
Infrared images by multiple microcomputer system, processing of, 267
Inspection of drilled holes, real-time image processing system for automated, 85
Integrating optical correlator with variable time scaling, compact, time-, 161
Integration (VLSI), special-purpose devices for signal and image processing: an opportunity in very large scale, 76
Interactive array processing system, SPRINT—a high speed, 249
Interactive and recursive signal processor for 16-bit microcomputers, an, 279
Interconnection networks for a class of sensor data processing problems, evaluation of multi-microprocessor, 238

Language? Ada as a signal-processing, 205
Logic element arrays for use in optical digital processors: applications and limitations, sequential, 139

Magnetostatic wave devices for microwave signal processing, 96
Microcomputer system, processing of infrared images by multiple, 267
Microcomputers, an interactive and recursive signal processor for 16-bit, 279
Microwave signal processing, magnetostatic wave devices for, 96
Missile defense, optical sensor signal processing requirements for ballistic, 2
Missions, optical communications for deep space, 29
Mosaic sensor, space surveillance signal processor (S^3P) for background suppression and target detection with a staring, 20
Motion-adaptive TV data compression, 51
Multi-microprocessor interconnection networks for a class of sensor data processing problems, evaluation of, 238
Multiple microcomputer system, processing of infrared images by, 267
Multiprocessor project, signal processing aspects of the S-1, 224

Neighborhood coding, track assembly and background suppression using an array processor and, 258
Networks for a class of sensor data processing problems, evaluation of multi-microprocessor interconnection, 238

On-board satellite signal processing and simulation, 189
Optical communications for deep space missions, 29
Optical computation of the ambiguity function, real time, 104
Optical convolution/correlation, digital correlation by, 155
Optical correlator with variable time scaling, compact, time-integrating, 161
Optical digital processors: applications and limitations, sequential logic element arrays for use in, 139
Optical processing, digital, 149
Optical sensor signal processing requirements for ballistic missile defense, 2
Out-of-the-cockpit visual scene generation in real time, the ultimate resolution criterion for, 61

Processing adaptive background suppression for real-time signal, 37
Processing applications, survey of concurrent-processors for signal, 174
Processing aspects of the S-1 multiprocessor project, signal, 224
Processing, digital optical, 149
Processing of infrared images by multiple microcomputer system, 267
Processing language? Ada as a signal-, 205
Processing, magnetostatic wave devices for microwave signal, 96
Processing: an opportunity in very large scale integration (VLSI), special-purpose devices for signal and image, 76
Processing problems, evaluation of multi-microprocessor interconnection networks for a class of sensor data, 238
Processing of real-time radiographic images, 70
Processing requirements for ballistic missile defense, optical sensor signal, 2
Processing and simulation, on-board satellite signal, 189
Processing of spaceborne synthetic aperture radar data, considerations on real-time, 11
Processing system for automated inspection of drilled holes, real-time image, 85
Processing system, SPRINT—a high speed interactive array, 249
Processing systems, super resolution algorithms in distributed real-time signal, 220
Processor design, the role of simulation in top down distributed signal, 182
Processor, digital beam forming, 232
Processor (FTSP), a distributed fault-tolerant signal, 198
Processor and neighborhood coding, track assembly and background suppression using an array, 258
Processor for 16-bit microcomputers, an interactive and recursive signal, 279
Processor (S^3P) for background suppression and target detection with a staring mosaic sensor, space surveillance signal, 20
Processors: applications and limitations, sequential logic element arrays for use in optical digital, 139
Processors, characteristics of acousto-optic devices for signal, 129
Processors for signal processing applications, survey of concurrent-, 174
Project, signal processing aspects of the S-1 multiprocessor, 224

Radar data, considerations on real-time processing of spaceborne synthetic aperture, 11
Radiographic images, processing of real-time, 70
Real time optical computation of the ambiguity function, 104
Real time, the ultimate resolution criterion for out-of-the-cockpit visual scene generation in, 61
Real-time image processing system for automated inspection of drilled holes, 85
Real-time processing of spaceborne synthetic aperture radar data, considerations on, 11
Real-time radiographic images, processing of, 70
Real-time signal processing, adaptive background suppression for, 37
Real-time signal processing systems, super resolution algorithms in distributed, 220
Recursive signal processor for 16-bit microcomputers, an interactive and, 279
Residue arithmetic, high-speed, two-dimensional filtering using, 213
Resolution algorithms in distributed real-time signal processing systems, super, 220
Resolution criterion for out-of-the-cockpit visual scene generation in real time, the ultimate, 61
Role of simulation in top down distributed signal processor design, the, 182

S-1 multiprocessor project, signal processing aspects of the, 224
SPRINT—a high speed interactive array processing system, 249
(S^3P) for background suppression and target detection with a staring mosaic sensor, space surveillance signal processor, 20
Scaling, compact, time-integrating optical correlator with variable time, 161
Satellite signal processing and simulation, on-board, 189
Scene generation in real time, the ultimate resolution criterion for out-of-the-cockpit visual, 61
Sensor data processing problems, evaluation of multi-microprocessor interconnection networks for a class of, 238

Sensor signal processing requirements for ballistic missile defense, optical, 2
Sensor, space surveillance signal processor (S^3P) for background suppression and target detection with a staring mosaic, 20
Sequential logic element arrays for use in optical digital processors: applications and limitations, 139
Signal and image processing: an opportunity in very large scale integration (VLSI), special-purpose devices for, 76
Signal processing, adaptive background suppression for real-time, 37
Signal processing aspects of the S-1 multiprocessor project, 224
Signal processing applications, survey of concurrent-processors for, 174
Signal-processing language?, Ada as a, 205
Signal processing, magnetostatic wave devices for microwave, 96
Signal processing requirements for ballistic missile defense, optical sensor, 2
Signal processing and simulation, on-board satellite, 189
Signal processing systems, super resolution algorithms in distributed real-time, 220
Signal processor design, the role of simulation in top down distributed, 182
Signal processor (FTSP), a distributed fault-tolerant, 198
Signal processor for 16-bit microcomputers, an interactive and recursive, 279
Signal processor (S^3P) for background suppression and target detection with a staring mosaic sensor, space surveillance, 20
Signal processors, characteristics of acousto-optic devices for, 129
Simulation, on-board satellite signal processing and, 189
Simulation in top down distributed signal processor design, the role of, 182
16-bit microcomputers, an interactive and recursive signal processor for, 279
Space missions, optical communications for deep, 2
Space surveillance signal processor (S^3P) for background suppression and target detection with a staring mosaic sensor, 20
Spaceborne synthetic aperture radar data, considerations on real-time processing of, 11
Special-purpose devices for signal and image processing: an opportunity in very large scale integration (VLSI), 76
Spectra for surveillance and countersurveillance, direct electronic Fourier transform, (DEFT), 113
Spectra for terrain feature classification, direct electronic Fourier transform, (DEFT), 122
Speed interactive array processing system, SPRINT—a high, 249
Speed, two-dimensional filtering using residue arithmetic high-, 213
Staring mosaic sensor, space surveillance signal processor (S^3P) for background suppression and target detection with a, 20
Super resolution algorithms in distributed real-time signal processing systems, 220
Suppression for real-time signal processing, adaptive background, 37
Suppression and target detection with a staring mosaic sensor, space surveillance signal processor (S^3P) for background, 20
Suppression using an array processor and neighborhood coding, track assembly and background, 258
Surveillance and countersurveillance, direct electronic Fourier transform (DEFT) spectra for, 113
Surveillance signal processor (S^3P) for background suppression and target detection with a staring mosaic sensor, space, 20
Survey of concurrent-processors for signal processing applications, 174
Synthetic aperture radar data, considerations on real-time processing of spaceborne, 11
System, SPRINT—a high speed interactive array processing, 249

Target detection wth a staring mosaic sensor, space surveillance signal processor (S^3P) for background suppression and, 20
Terrain feature classification, direct electronic Fourier transform (DEFT) spectra for, 122
Time image processing system for automated inspection of drilled holes, real-, 85
Time-integrating optical correlator with variable time scaling, compact, 161
Time optical computation of the ambiguity function, real, 104
Time radiographic images, processing of real-, 70
Time scaling, compact, time-integrating optical correlator with variable, 161
Time, the ultimate resolution criterion for out-of-the-cockpit visual scene generation in real, 61
Tolerant signal processor (FTSP), a distributed fault-, 198
Top down distributed signal processor design, the role of simulation in, 182
Track assembly and background suppression using an array processor and neighborhood coding, 258
Transform (DEFT) spectra for terrain feature classification, direct electronic Fourier, 122
Transform (DEFT) spectra for surveillance and countersurveillance, direct electronic Fourier, 113
Transform faster than fast Fourier transform (FFT), Fourier, 167
Transform (FFT), Fourier transform faster than fast Fourier, 167
TV data compression, motion-adaptive, 51
Two-dimensional filtering using residue arithmetic, high-speed, 213

Ultimate resolution criterion for out-of-the-cockpit visual scene generation in real time, the, 61
(VLSI), special-purpose devices for signal and image processing: an opportunity in very large scale integration, 76
Variable time scaling, compact, time-integrating optical correlator with, 161
Very large scale integration (VLSI), special-purpose devices for signal and image processing: an opportunity in, 76
Video image enhancement, airborne, 47
Visual scene generation in real time, the ultimate resolution criterion for out-of-the-cockpit, 61

Wave devices for microwave signal processing magnetostatic, 96